

REMARKS

Claims 1-22 are currently pending and stand rejected in the Final Office Action as per the following obviousness rejections:

(i) claims 1 and 15 stand rejected as being unpatentable over U.S. Patent No. 4,786,891 to Ueda in view of U.S. Patent No. 6,788,895 to Trezza;

(ii) claim 14 stands rejected as being unpatentable over U.S. Patent No. 4,762,391 to Margolin in view of U.S. Patent No. 5,262,635 to Curbelo

(iii) claims 2-10, 12-13 and 16-18 stand rejected as being unpatentable over Ueda in view of Trezza and Curbelo;

(iv) claim 11 stands rejected as being unpatentable over Ueda in view of Trezza and Curbelo as applied to claims 2 and 10 above and further in view of U.S. Patent No. 5,747,978 to Gariboldi.

With regard to claims 19-22, the Examiner's rejection is not based on cited art, but rather Examiner's opinion that such claims do "not present patentable subject matter."

The claimed inventions include systems and methods to provide a "self aligned" photodetector, wherein an optical detector, which comprises an array of photosensors, is disposed to face the end of an optical fiber. Physical alignment of the optical fiber to a single given photo-sensor of the detector is not critical (as in conventional devices and methods). Instead automatic alignment is effectively provided electronically using a controller to detect actuated photo-sensors in the array to determine the relevant optical signal.

With respect to rejection (i) above for claims 1 and 15, the combination of Ueda and Trezza does not disclose or suggest a system or method to *generate a detection signal by processing photo-sensor signals output from one or more photo-sensors in the array that are actuated by said optical signal, while discounting photo-sensors in the array that are not actuated by said optical signal, to thereby electronically align the optical fiber to the photo-detector device*. To begin, Ueda generally discloses an array of photosensors (in FIG. 12), which is used for a completely different purpose that the claimed inventions. In Ueda, the array is used for determining shift positions or angle of rotation in relation to an absolute position for implementation with motors, which requires fundamentally distinct signal processing techniques.

Moreover, Trezza does not cure the deficiencies of Ueda in this regard. Trezza discloses in FIG. 3B an array of detectors (14) and (22) that are connected to corresponding transmitters (emitters) (24) and (12), wherein each unique emitter/detector pair is connected by a signal fiber optic strand (see, Col. 7, lines 26-45). Trezza does not disclose or suggest that a detector (14) or (22) comprises an *array of photo-sensors* which effectively enable alignment of a fiber optic strand to the detector, as essentially contemplated by the claimed inventions. In this regard, Trezza discloses nothing more than a process of mapping point to point connections between transceivers where one or more detectors can be mapped to an emitter when there is misalignment (see, Col. 7, lines 64-67 and Col. 8, lines 53-59).

Based on the above, the combination of Ueda and Trezza neither discloses or suggests various features of claims 1 and 15, and is thus legally deficient to establish a *prima facie* case of obviousness against claims 1 and 15.

Moreover, with respect to rejection (ii) there is no motivation for combining the teachings of Margolin and Curbelo as against claim 14. Margolin generally discloses a photosensor array, where the sensor array is aligned to a fiber bundle using *physical alignment* methods (See, e.g., Col. 8, lines 34-47). Further, as acknowledged by the Examiner, Margolin does not teach the claimed controller having AC and DC extracting circuitry, etc. This is rather obvious in that Margolin is not even remotely related to methods for performing automatic electronic alignment of detectors. Thus, Examiner cannot rely on the teachings of Margolin as against the claimed inventions.

Moreover, Curbelo's purported general teaching of AC and DC extraction circuits is dissimilar to the claimed inventions and do not perform functions similar to the claimed functions of the claimed controller. In previous rejections, the Examiner *failed* to demonstrate why it would have been obvious to modify the "controller" of Margolin to include AC and DC extraction circuits for each photosensor in the array of photosensors. Indeed, in the Final Action, the Examiner cites the control circuit (26) of FIG. 2 of Margolin. However, the control circuit (26) performs the function of controlling address generators (24) and (25) for controlling the readout of the signals in the array, which readout signals are processed by a utilization circuit (27). (See, e.g., Col. 3, lines 42-63).

Thus, on a fundamental level, the controller (26) of Margolin does **not** operate to generate a detection signal by processing photo-sensor signals output from one or more photo-sensors in the array that are actuated by said optical signal, while discounting photo-sensors in the array that are not actuated by said optical signal, to thereby electronically align the optical fiber to the photo-detector device, as claimed in claim 14. In this regard, Examiner can not contend that the controller (26) would or could be

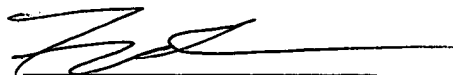
modified to include the AC and DC circuitry, etc. as taught by Curbelo. In short, the combination of Margolin and Curbelo is legally deficient to establish a prima facie case of obviousness against claim 14.

With regard to rejections (iii) and (iv) above for claims 2-13 and 16-18, since these rejections are based, in part, on the combination of Ueda and Trezza as applied to base claims 1 and 15, these rejections would be improper for at least the above reasons given for claims 1 and 15.

Moreover, with regard to the rejection of claims 19-22, since such rejections are based on Examiner's opinion rather than cited art, the Examiner is requested to provide an Affidavit as is required to attest to Examiner's personal knowledge as to the technical basis that such claims do "not present patentable subject matter." Otherwise, Examiner must withdraw the rejection of such claims.

Accordingly, for at least the above reasons, withdrawal of the obviousness rejections is respectfully requested.

Respectfully submitted,



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